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Quisnam sexcaudatus?

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A NEW MEGATHYMUS FROM ARIZONA

ENTOMOLOGICAL NEWS

AND

PROCEEDINGS OF THE ENTOMOLOGICAL SECTION

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A New Megathymus from Arizona.

By OTHO C. POLING.

See Plate IV.

Large objects are usually first to be discovered, even by a casual observer, so it would seem the more remarkable that our most robust and heavily constructed North American diurnal should have, until the present year, escaped observation.

Megathymus ursus n. sp.—female.—Expanse, 3½ inches.

Colors and markings above and below are correctly reproduced by the accompanying plate. Type, one female in the collection of the author. Habitat, Pinal County, Arizona. When both sexes of the described species in this genus are known, the specific name which I have used in presenting this insect may become synonymous. This, however, is not admitted by any of several well-known entomologists who have seen the insect or its likeness, and my own opinion that it may be the female *neumogenii* is not shared by anyone whom I have

so far consulted. In Biol. Cent. Am. Het. 2, 320, pl. 69, fig. 3 and 4, the male and female *neumoegenii* are figured. Whether *fig.* 4 is in reality the female *neumoegenii* may be considered doubtful when it is known that a structural examination of my series of over one hundred examples taken through three seaseasons fails to reveal a single female of this species. It is therefore, my conviction that the female *Megathymus neumoegenii* remains unknown. The reference of *ursus*, an insect of more than twice the average size of *neumoegenii*, with body half an inch in thickness and more massive than any diurnal known to our fauna as the female of the smallest species in the genus to which it belongs is, however, too radical to be accepted without positive proof, and it is for this reason that I bestow a specific name on what I consider a described species.

Lost Knowledge.

By C. F. Baker.

The recent death of Dr. Lugger again calls attention to a matter which has been discussed in various journals before. Dr. Lugger was a special student of the Coleoptera and had a very fine collection. He also studied Minnesota moths and had started a valuable collection when I visited him years ago. It was most interesting to go over the beetles with him and listen to his discussions of habits and obscure points in classification; *many facts concerning which, according to his own statement, were unpublished.* He has departed to the "bourne from which no traveller returns," and all that interesting array of knowledge —the gatherings of many, many years of patient and scholarly investigation—have gone with him; for Dr. Lugger published very little.

Not long ago I reported on what I considered the solution of a very vexing problem—one that had long puzzled me and one that had consumed much time and thought. Soon after, I received a letter from one of our old-time authorities, in which he says: "What is all this fuss about? You are right, but I have known all this for many, many years." He had known

it all long before, but he had allowed an error to be perpetuated in our literature and he had allowed the younger students to flounder on through the same morass he had successfully breasted years before, and which a word from him would have saved them from.

All of our greater authorities should be constant contributors to our magazines. Most of them are not. They are to say why. Most of them are more or less concentrated on great works, but they owe it to us to report on the very numerous secondary results that have always come as a by-product—results often of greatest interest and value. Talk with any of them and you will find them perfect storehouses of knowledge which ought not to remain buried and die with them. They may consider it undignified to publish detached results, but I am sure it is not so. Over and above this consideration, we need, secondarily, their criticism.

Our journals are full of the work of younger students and it all passes current without remark. Incomplete work or erroneous conclusions, often known to be such by the older authorities, frequently receive no further attention than a shrug of the shoulders. They might give us what we need while they dispose of the after-dinner cigar. We need criticism—honest, kindly criticism that hews clean to the line. There are fifteen or twenty men in this country who might raise our standard in connection with entomological work far above what it is with very little cost to themselves, but to the very material enrichment of our entomological literature.

And yet there are others who will pass from us, carrying with them many of their hard-earned results, which they might just as well receive credit for, which would be of inestimable working value to younger students, and which the burying of will but leave to be all done over again.

I might refer, for one instance, to the matter of secondary sexual characters. It is a subject of the very highest biological interest and importance, yet the facts concerning it, as relate to American insects, are almost wholly buried either in technical descriptions or the minds of the older authorities who have studied special groups for many years. I wish a book might

be written on this subject—and it would make a big book—composed of contributions from all the older authorities on their special groups. If as complete as possible and fully illustrated it would make one of the most important entomological and biological contributions of the era, and would be an indispensable work of reference to every entomological student on earth. And this they have to give. Will they give it?

The Blackberry Crown-borer in New Mexico.

Notes from the New Mexico Biological Station 3.

By T. D. A. Cockerell.

Dr. J. B. Smith, in his little work on Economic Entomology, writes: "Blackberries are often attacked by a larva at the surface of the ground or a little below it, boring sometimes a little distance up or down the cane or completely around it, for which reason it has been called the blackberry crown-borer. Signs of its presence are the sudden wilting and rapid death of new shoots, and it comes to maturity in early September of the second year of its life, forming a pupa in the stalk itself. The resulting moth, *Bembecia marginata*, is black, very little marked with yellow, and the only satisfactory remedy is cutting out and destroying the larva as soon as its presence is indicated by the wilting leaves."

This pest has never been observed in New Mexico until I took some of the moths at Beulah, Sapello Canon, July 25 to 31, 1900. This locality is about 8,000 feet above the sea, in what is called the Canadian Zone. Two native plants of the blackberry genus, *Rubus strigosus* and *Rubus deliciosus*, were common at the locality, and it was doubtless in these that the moths passed their early stages. It is quite to be expected that they will attack the cultivated canes, when these are more generally grown.

The moths appear to differ somewhat from the eastern examples, being perhaps rather smaller, with dark scales blue-black; antennæ, sides of thorax and dark parts of legs quite strongly purple; collar almost white; longitudinal marks on anterior part of thorax almost obsolete; basal two-thirds of

four hind femora black; middle tibiæ above with the basal half and the apical fourth black; legs (except the black) orange fulvous; wing-veins beyond the cell on both wings covered with black scales. It seems to me that this New Mexico insect might fairly be given a distinctive name, but Mr. Beutenmuller, who is the principal authority on this group of moths, has examined a specimen and states that it must be regarded as true *Bembecia marginata*.

Nomenclatural Notes on Two Genera of Orthoptera.

By James A. G. Rehn.

BLATTA.

The genus *Blatta* Linnaeus (Syst. Nat., X ed., p. 424, 1758) has been subjected to considerable dividing, as has been the case with almost all Linnean genera, but the fact remains that to-day we hardly know to what to apply the name. An examination of the originally included species reveals the fact that the matter can be quickly settled. As the name *Blatta* is a classic word, the method of procedure would be similar to that used in the case of *Locusta* and *Tettigonia*, recently examined by the author (Canad. Ent., xxxiii, pp. 118–121), the non-exotic species (or rather those treated as such by the original describer) being the only ones to be considered in the process of elimination.

The originally included species, with the genera to which they have been removed and the dates of removal, are as follows:

gigantea—*Blaberus* Serville (*Blabera* auct.), 1831.
ægyptiaca—*Heterogamia* Burmeister, 1838.
surinamensis—*Pycnoscelus* Scudder, 1863.
americana—*Periplaneta* Burmeister, 1838.
nivea—*Panchlora* Burmeister, 1838.
africana—*Heterogamia* Burmeister, 1838.
orientalis—*Stylopyga* Fischer v. Wald., 1846.*

* Kirby (Proc. Royal Dublin Soc. (n. s.), vi., p. 562) gives the original spelling as *Steleopyya*, citing Bull. Mosc., vi, p. 356, as the reference. I am unable to examine this work, so I use the generally accepted form in the paper.

lapponica——*Ectobius* Westwood (*Ectobia* auct.), 1835.
oblongata—*Pseudomops* Serville, 1831.

By considering the only two non-exotic species, *orientalis* and *lapponica*, the name *Stylopyga* is seen to be a synonym of *Blatta*, as *Ectobius* was instituted eleven years previous. An examination has shown that *Pseudomops* antedates *Thyrsocera* 1838, by seven years, as pointed out by Kirby (Proc. Royal Dublin (n. s.), vi, p. 561).

The name *Kakerlac* Latreille (Le Règne Animal, v, p. 175, 1829), has often been associated with several of the species mentioned above, but on examination it is apparent that but one was so associated by the describer of the genus. Three species, *orientalis*, *limbata* and *decipiens*, were included under Latreille's name; the first being removed to *Stylopyga* in 1846, while the last two were not removed until 1865, when Brunner placed them in his genus *Loboptera*.* The name *Kakerlac* thus replaces Brunner's genus.

ACRYDIUM.

The genus *Acrydium* Geoffroy (Hist. Abr. Ins., i, p. 390, 1762) as asserted by Kirby (Proc. Royal Dublin Soc. (n. s.), vi, p. 592) and Kircaldy (The Entomologist, xxxiv, pp. 241–243), should replace the name *Tetrix* Latreille (*Tettix* auct.) the types being *bipunctatum* L., and *subulatum* L.† In this case the use of the name in connection with the large species allied to *Schistocerca* is not allowable, *Cyrtacanthacris* Walker, 1870, being the next name used for the same.

In a recent study of the Linnaean genus *Locusta* (Canad. Ent., xxxiii, p. 121) the author gave Latreille, 1804, as the authority and data of *Acridium* (an emendation of *Acrydium*), but the proper adjustment of the name, as above, will cause the name *Locusta* to fall on those insects formerly known as *Acridium* or *Cyrtacanthacris*, the latter being sixteen years later than Fischer's genus *Stenobothrus*.

* Burmeister placed these in his genus *Polyzosteria*, but that genus was considerably divided by Brunner.

† To those who would not accept Geoffroy's genera because that author was not consistently binomial, it might be said that Fabricius (the next author to use the name) included, but the two above-mentioned species in the genus (vide Syst. Ent., p. 278, 1775).

The Bee-genus Xenoglossa in California.

By T. D. A. Cockerell.

In Canadian Entomologist, August, 1896, is described the finding of three species of *Xenoglossa* in the flowers of *Cucurbita* in New Mexico. Since that time, wherever I have found *Cucurbita* I have also found at least one species of *Xenoglossa*. Therefore, when I observed quantities of *Cucurbita foetidissima* in the city of Los Angeles last July, I lost no time in looking for *Xenoglossa*, and was duly rewarded by the capture of two species in numbers.

(1.) *Xenoglossa patricia angustior*, Ckll., Entom., March, 1900, p. 64. Described from one example taken at Buckeye, Arizonia.

Five taken at Los Angeles, California, in flowers of *Cucurbita foetidissima*, July 22, 1901.

(2.) *Xenoglossa angelica*, n. sp.—♂, ♀, about 13 mm. long. Similar to the eastern *X. pruinosa* Say, but conspicuously differing in the velvety pubescence of the abdomen, which is orange-golden instead of silvery-white, especially bright and beautiful in the ♀, covering the apical half. Structurally, the insects agree in all essential particulars, and one would not regard them as distinct species, were it not that the color-difference is conspicuous and perfectly consistent in long series of each, and they inhabit entirely different regions.

Hab.—Los Angeles, California, in flowers of *Cucurbita foetidissima*, July 22, 3 ♀, 8 ♂; County Farm, Los Angeles Co., at flowers of *Ipomœa*, 3 ♂, July 15. Also a male taken by my wife at San Diego, Calif., August 10, at flowers of *Ipomœa*.

Xenoglossa ipomœæ Rob., from Illinois, seems to be hardly distinct from *X. pruinosa*.

Notes on Butterflies and Description of an Aberration.

By Addison Ellsworth.

I see by your April, 1901, issue that Mr. Harvey Mitchell, at a meeting of the Harris Club of Boston, exhibited a melanic male *Colias philodice* from Medford, Mass. I would state that I have a melanic male of *Colias philodice* taken in the city of Binghamton, N. Y., Aug. 12, 1898. It is almost coal black, so dark in fact that the usual border is only discernable by its lighter shade.

Another insect in my possession, worthy of more than a passing notice, is a male of *Papilio asterias*, which, but for the four rows of abdominal spots, so closely resembles *Papilio indra* as to be scarcely distinguishable from that species. As in *indra* there is not the slightest indication of fulvous on inner bands on under side of primaries, though it is faintly present on those of the secondaries. It was taken near Lestershire, N. Y., June 17, 1899.

Another interesting form is an aberration or variety of *Melitæa phæton* taken at Vestal, N. Y., June 10, 1890. It is of a deep velvety black with a marginal row of bright orange red spots on both wings, larger than in the normal form. This is followed by a single row of pale yellow spots, the third, fourth and fifth, on primaries, being geminate. A single faint and almost imperceptible red dash marks the center of the discal cell. On under side of primaries are two large brick-red spots and a slight indication of a second transverse band of yellow lunes. On secondaries are six large red spots, promiscuously arranged, and three or four light yellow dots near inner angle. In appearance there is as much difference between this insect and the parent form as there is between *phæton* and any other of our larger *Melitæas* and is more beautiful than any of them. I believe it distinct enough to be worthy a name and would call it *Melitæa streckeri*, in honor of Dr. Herman Strecker of Reading, Pa., the peer of all American Lepidopterists.

New Species of Butterflies from Bolivia.

By A. G. Weeks, Jr.

Lycæna ruberrothei sp. nov.

Head above black, with a gray color; beneath white. Thorax above black, bordered by gray beneath, nearly white. Abdomen above black, beneath white tinged with yellow. Legs white. Antennæ above black; beneath whitish, with annulations at base of each joint. Club light brown beneath. Upper side of fore wing very light blackish brown without any markings. Basal area black suffusing to ground color at centre of wing. Hind margin has a very fine dark thread. Nervures and nervules dark from base to near margin. Upper side of hind wing same as fore wing in general coloring. Hind margin has a very dark fine thread. In the in-

terspaces at hind margin is a series of lunules, black with a very light brownish border. At the upper angle these are scarcely perceptible. The most prominent one situated above the lower submedian nervule. Under side of fore wing very light brownish very heavily dusted with white scales in basal half of wing. There is a mere suggestion of lighter lunules in interspaces at hind margin. The nevures and nervules are somewhat blackish. Under side of hind wing the same except that the dusting of white scales covers the entire wing. Expanse .75 inches.

Hab.—Sicasica, Bolivia.

Taken October 1, 1899, in the mountains near Sicasica.

Cobalopsis duspecca sp. nov.

Head, palpi, thorax, abdomen and legs, dark blackish brown above, brownish gray beneath. Antennæ the same, but somewhat yellowish towards club on underside. Wings above darkish brown, darkening somewhat at basal area.

On forewings are four dots. Two of these are in interspaces next below costa one-third distance from apex to base. The other two are below near central portion of wing and are white lines rather than spots, the first crossing the interspace below top of discoidal space, the second being more prominent and crossing the next lower interspace, but a sixteenth inch nearer base than the first. There is a suggestion of a third subcostal dot under the two above mentioned, and in a long series of specimens this would undoubtedly show itself fairly prominently. Underside of forewing identical with upper surface except that the color is deader and shades to brownish gray towards hind and inner margins. Under side of hind wing dark brown up to a line drawn from upper angle to centre of inner margin; outside of this lighter, tending to grayish brown. Just above subcostal nervure, one quarter inch from base, is a light brownish spot, and outside of it in same interspace is another smaller one. There are two other similar spots below each of these slightly nearer hind margin. The grayish brown area above noted has an interspacial line of same color as basal area, not running to inner margin, but showing prominently in centre of wing only, being more in the nature of a series of interspacial lines. The anal angle, on close inspection, is crossed by a few lighter colored transverse lines, very indistinct. Expanse 1.80 inches.

Hab.—Coroico, Bolivia.

This is closely allied to *C. descritus* Mab. Taken in May, 1899.

Cosmosatyrus nilesi sp. nov

♂.—Head, palpi and thorax dark brown above and below. Antennæ and legs above, dark brown; below, light brown. Abdomen above, dark brown; below, very light brown.

The upper surface of both wings is dark brown suffusing to very light brown or bronze in outer half of wings. The entire surface has a golden lustre.

Fringe at hind margin of forewing is dark brown. Hind margin is edged with a dark thread. The space within the hind margin for a quarter of an inch is somewhat darker than the area next within it and is bordered on its inner side by a dark jagged line running from the subcostal nervule down to the lower submedian nervule. This line is very indistinct in some specimens, quite imperceptible in others. Within this line is an area of very light brown or bronze covering apical area and extending downwards to inner margin; it suffuses into the dark brown of basal area as it reaches discoidal space. In some specimens the basal side of this light area is bordered by a very distinct line of very dark brown, starting near costa and running across outer edge of discoidal space, then extending outwards towards hind margin and in next lower interspace turning towards the base and then turning abruptly towards lower angle. In such specimens the light area of outer half of wing appears as a broad distinct band with its dark borders on either side. The inner margin is black. In the apical area midway from discoidal space to hind margin are two very prominent ocelli adjoining one another, black with a white dot at centre, one above the other and surrounded by light yellowish. Below these in interspace above the lower submedian nervule is another similar ocellus but smaller. In some specimens these ocelli are wanting, there being but one black dot only in apical area.

The hind wing is dark brown suffusing to light, brown or bronze towards hind margin. The nervures and nervules are soft dark brown as they cross this light area. One-eighth inch within the hind margin is a dark line running from upper angle and disappearing as it reaches the anal angle.

Under side of forewing dark brown with a slight golden lustre. Hind marginal fringe dark brown. Hind margin bordered by a dark thread. From the costa one-quarter distance from the apex to base is a distinct dark line running to submedian nervure one-eighth inch within hind margin. There is another line crossing centre of wing from lower subcostal nervule to submedian nervure just outside the discoidal space. This line is irregular. The basal area has no markings.

The under side of hind wing resembles in general appearance, the markings in the genus *Chionobas*. The ground color is dark brown. The nervures and nervules are distinctly white in most specimens. A dark line runs from upper angle to the submedian nervure one-eighth inch within hind margin and following its contour. Across the centre of the wing from costa towards anal angle is another irregular dark line. These two lines are continuations of those on forewing. In the area between these lines is a series of four or five interspacial elongated whitish spots, very prominent in some specimens. The basal area has a mottled appearance owing to a mass of semi-prominent dark interspacial lines. Expanse 1.60 inches.

♀.—General coloring and marking the same as ♂, except that the ocelli and markings are more pronounced in some specimens.

Hab.—Sicasica, Bolivia.

Described from seventeen specimens taken near Sicasica in October, 1899. There is great variation in the prominence of the ocelli, and two figures, showing the two extremes, are at least instructive. My specimens intergrade nicely from one to the other.

Syrichthus nigella sp. nov.

Head, thorax, abdomen and antennæ above, black; beneath, nearly white. Club above, black; beneath, reddish brown. Legs white.

Ground color of forewing nearly black. Basal area and costa near base dusted with whitish scales. In subcostal interspaces near apex, are three white spots. Below these in next two interspaces are two white spots nearer hind margin. In interspace below these is one white spot nearer base, and under the first mentioned subcostal spots. In the next three lower interspaces down to submedian nervure, are three larger white spots, a little nearer base. Nearer costa midway between apex and base is a white dash, and under it at end of discoidal space, a white spot. Below this in next two interspaces are two white spots, the lower resting on submedian nervure and nearer base. The hind marginal fringe is very pronounced, narrower at apex than at lower angle and of pure white. Inner margin edged with white.

Upper side of hind wing of same ground color. Running from centre of costa across centre of wing and ending at submedian nervure is a broad band of white with irregular edges. At its central portion it broadens or suffuses strongly towards the base through the discoidal space. Outside of this band the area to hind margin is nearly black with a line of interspacial white dots. The marginal fringe is very heavy and pure white. Inner margin edged with white.

The spots and white markings of upper surface are very distinctly marked showing scarcely any suffusion.

The general color of the under surface is white with black or dark markings.

On forewing the white spots of upper surface are repeated. The costa midway to apex is distinctly white. The area near costa between the two rows of white spots is dark brownish, the darkest portion of the wing. The space below lower submedian nervule to inner margin is grayish white. The hind margin is touched slightly with brownish. The fringe is white.

Under side of hind wing white. Across apical area is a dash of black. There is a prominent dash of black running from median nervure near the hind margin across to submedian nervure. Above this and parallel

to it, in centre of the wing, is a short black dash. In subcostal area over the discoidal space are two black spots, and another at the base. Inner marginal area tends to grayish. Expanse .80 inches.

Hab.—Sicasica, Bolivia.

Taken in October, 1899.

A List of the Dragonflies Observed in Western Pennsylvania.

By E. B. Williamson.

(Continued from page 71.)

27. **Dromogomphus spinosus** Selys.

Alleghany County (G. A. Link); Alleghany County, May 3, 1899; Ohio Pyle, June 25–30, 1900. The Ohio Pyle specimens have the humeral and antehumeral stripes and the stripe on either side of the mid-dorsal thoracic carina wider than in Indiana specimens; the humeral and antehumeral are continuous for almost their entire lengths, and the stripe on either side of the mid-dorsal carina passes over the antealar sinus, joining with the antehumeral stripe.

28. **Gomphus villosipes** Selys.

Turtle Swamp, June 3, 1899. In the spring of 1900 I found this species in Mahoning County, Ohio, one of the eastern tier of counties in Ohio, very abundant about ponds which had been formed by a small stream changing its course from time to time in a broad valley. The dragonflies spent much of their time at rest on the spatterdock leaves with which these ponds were filled.

29. **Gomphus sordidus** Hagen.

New Brighton, Beaver County, May 28, 1899 (H. D. Merrick); Idlewild, May 30, 1899. In eastern Ohio, Columbiana County, I observed a couple of this species pairing at rest, clinging to the leaf of a blackberry bush. The male held the female by the head with his abdominal appendages.

30. **Gomphus exilis** Selys.

Ohio Pyle, June 28, 1900; Confluence, June 30, 1900. Taken along the Youghiogheny River only at its more sluggish parts where the banks are muddy.

31. **Gomphus spiniceps** Walsh.

Allegheny River, Alleghany County, July 4, 1899, males and females were emerging in numbers.

32. **Gomphus parvulus** Selys.

Allegheny River, Alleghany County, May 13, 1899, and June 10, 1900, a single male on each date (J. L. Graf).

33. **Gomphus albistylus** Hagen.

Lehigh Gap, June 30, 1897, one female (*teste* Calvert); Idlewild, May 30, 1899, one female; Ohio Pyle, June 24, 1900; Rockwood, June 29, 1900. I follow Dr. Calvert and Professor Harvey in regarding *G. naevius* Hagen as a synonym of *G. albistylus* Hagen. I have a male from Professor Harvey which is identical with the Pennsylvania species.

34 **Gomphus brevis** Hagen.

Ohio Pyle, June 24, 25 and 27, 1900; Rockwood, June 29, 1900; Confluence, June 30, 1900. During a week's collecting in June about Ohio Pyle this seemed to be the most abundant Gomphine. It is not infrequently met with in some sheltered, bush-skirted meadow, attracted there probably from its native ripples by the wealth of insect prey which the more retired retreat harbors.

35. **Gomphus viridifrons** Hine.

Ohio Pyle, June 25, 1900, two males; June 28, 1900, one female; Ohio River, May 3, 1899, a single teneral female.

[A drawing—plate 3, fig. 1 accompanying this paper—made by Mr. Williamson before those of Mr. Hine in the Ohio Naturalist, vol i, pl. 5, were published, shows the tips of the vulvar lamina to extend slightly beyond the hind margin of IX, while in Mr. Hines' figures the tips do not reach as far as that hind margin.—P. P. CALVERT.]

36. **Gomphus vastus** Walsh.

Beaver County, May 25, 1899; Alleghany County, May, June and July (J. L. Graf and D. A. Atkinson).

37. **Gomphus fraternus** Say.

Alleghany County, May (R. F. Foerster and J. L. Graf); Ohio Pyle, June 28, 1900, a female, taken while eating a mature male of *Argia putrida*.

38. **Progomphus obscurus** Rambur.

Alleghany County, May (J. L. Graf); Ohio Pyle, June 18, 1899.

39. **Hagenius brevistylus** Selys.

Ohio Pyle, June 18, 1899, one male taken, several seen.

40. **Tachopteryx thoreyi** Hagen.

Alleghany County, June 1 to July 16, 1899, and July 15 and 21, 1900 (J. L. Graf); New Brighton, June 11, 1900 (H. D. Merrick); Ohio Pyle, June 18, 1899 and June 23–30, 1900.

41. **Cordulegaster maculatus** Selys.

Ohio Pyle, June 25, 1900, a single male, flying along the ditch at the side of the railroad track.

42. **Cordulegaster erroneus** Hagen.

Westmoreland County, July, a single female in the collection of the Carnegie Museum.

43. **Cordulegaster obliquus** Say.

Alleghany County, one female (A. S. Brent). A species of *Cordulegaster*, which seemed to be this one, was observed a few times along Squaw Run during the spring of 1899, but none were captured.

44. **Boyeria vinosa** Say.

Ohio Pyle, June 18, 1899, several tenerals were taken.

45. **Gomphæschna furcillata** Say, form *antilope* Hagen.

Pittsburg, May, 1899 (J. L. Graf), one female which entered Mr. Graf's home.

46. **Epiæschna heros** Fabricius.

Beaver County, May 25 and 28, 1899 (H. D. Merrick); Alleghany County, May, June, July, 1899 (E. Frost, J. L. Graf and D. A. Atkinson).

47. **Æschna constricta** Say.

Alleghany County (C. Daggette); Schenley Park, August 13, 1898; Silver Lake, August 27, 1898; Squaw Run, September 12 and 18, and October 16, 1898 (J. L. Graf); McKeesport, July 22, 1900 (D. A. Atkinson.)

48. **Anax junius** Drury.

Beaver County, May 25, 1899; Silver Lake, August 14, 1898; Schenley Park, August 31, 1898; Squaw Run, September 12, 1898; Alleghany County, April 12, May 3, 23 and 28, and June 3 and 4, 1899; Idlewild, May 30, 1899, and July 10, 1900 (D. A. Atkinson); Conneaut Lake, August 6, 1899 (D. A. Atkinson).

49. **Didymops transversa** Say.

Ohio Pyle, June 18, 1899, and June 25, 1900.

50. **Macromia illinoiensis** Walsh.

Alleghany County, May, 1899, (J. L. Graf); Ohio Pyle, June 18, 1899, and June 23–30, 1900; Rockwood, June 29, 1900; Confluence, June 30, 1900.

51. **Tetragoneuria cynosura** Say.

Idlewild, May 30, 1899.

52. **Neurocordulia uhleri** Selys.

Ohio Pyle, June 25, 1900, one male; Rockwood, June 29, 1900, two males. The internal triangle is present in the hind wings in every case excepting the left wing of one specimen. The wings are tinged with dull brown throughout, and there is a distinct brown spot in the posterior corner of the anal triangles of the hind wings.

53. **Somatochlora tenebrosa** Say(?)

A female, Westmoreland County, July, in the Carnegie Museum, is probably this species.

54. **Pantala flavescens** Fabricius.

Allegheny River, Alleghany County, August 20, 1900 (J. L. Graf).

55. **Tramea lacerata** Hagen.

Pittsburg, August 30, 1898; Turtle Swamp, May 3, 1899; Idlewild, July 10, 1900 (D. A. Atkinson). On May 3, 1899, another species, probably *Tramea carolina*, was flying about Turtle Swamp, but none were captured. *T. lacerata* when ovipositing goes through the same actions as *T. carolina*, accurately described by Davis in *Journ. N. Y. Ent. Soc. Vol. VI*,

p. 197, 1898, excepting, of course, that the female is held by the head and not by the neck. The pair fly along near the surface of the water; the male drops the female, the female strikes the tip of her abdomen to the water, and as she rises is again deftly seized by the male.

56. **Perithemis domitia** Drury.
Turtle Swamp, June, 1899.

57. **Celithemis eponina** Drury.
Idlewild, July 10, 1900 (D. A. Atkinson).

58. **Leucorhinia intacta** Hagen.
Idlewild, May 30, 1899.

59. **Sympetrum rubicundulum** Say.
Alleghany County, July (R. F. Foerster and D. A. Atkinson); Schenley Park, July 30 and August 30, 1898; Turtle Swamp, July 31 and August 21, 1898; Silver Lake, August 14 and 27, 1898; Squaw Run, September 4, 12 and 18, 1898 (J. L. Graf); Conneaut Lake, August 6, 1898 (D. A. Atkinson); Idlewild, July 10, 1900 (D. A. Atkinson).

60. **Sympetrum obtrusum** Hagen.
Alleghany County, July (D. A. Atkinson and C. Daggette); Silver Lake, August 27, 1898; Conneaut Lake, August 6, 1899 (D. A. Atkinson).

61. **Sympetrum vicinum** Hagen.
Conneaut Lake, August 6, 1899 (D. A. Atkinson).

62. **Sympetrum semicinctum** Say.
Alleghany County, July (D. A. Atkinson and C. Daggette); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Idlewild, July 10, 1900 (D. A. Atkinson).

63. **Mesothemis simplicicollis** Say.
Alleghany County, July, 1899 (D. A. Atkinson); Turtle Swamp, July 31 and August 21, 1898, and June 3, 1899; Conneaut Lake, August 6, 1899 (D. A. Atkinson); Idlewild, July 10, 1900 (D. A. Atkinson).

64. **Pachydiplax longipennis** Burmeister.
Turtle Swamp, August 21, 1898 and May 3, 1899; Pine

Creek, June 4, 1899; Alleghany County, May 23 and July, 1899 (D. A. Atkinson); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Idlewild, May 30, 1899, and July 10, 1900 (D. A. Atkinson).

65. **Libellula basalis** Say.

Alleghany County, July, 1899 (D. A. Atkinson); Allegheny River, Alleghany County, August 5 and 18, 1900 (J. L. Graf); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Idlewild, July 10, 1900 (D. A. Atkinson).

66. **Libellula semifasciata** Burmeister.

Beaver County, May 14 and 25, 1899 (H. D. Merrick); Alleghany County, April 30, May 3, 7, 21, 23 and 28, June 4, and July, 1899 (J. L. Graf and D. A. Atkinson); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Idlewild, May 30, 1899.

67. **Libellula pulchella** Drury.

Beaver County, May 25, 1899; Alleghany County, July 30 and 31, August 14, 21 and 30, and September 4, 1898, and May 21, 23 and 28, June 3 and 4, and July 1899 (J. L. Grat, D. A. Atkinson, A. S. Brent, R. F. Foerster and C. Daggette); Idlewild, May 30, 1899, and July 10, 1900 (D. A. Atkinson); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Ohio Pyle, June 18, 1899, and June 25, 1900.

68. **Plathemis lydia** Drury.

Beaver County, May 9, 25 and 28 (H. D. Merrick); Alleghany County, July 30 and 31, and August 14, 21 and 27, 1898, and May 4, 7, 23, 28 and 30, June 3 and 4, and July, 1899 (D. A. Atkinson, J. L. Graf and C. Daggette); Idlewild, May 30, 1899, and July 10, 1900 (D. A. Atkinson); Conneaut Lake, August 6, 1899 (D. A. Atkinson); Ohio Pyle, June 18, 1899, and June 26, 1900.

ADDITIONS TO THE ABOVE LIST.

By J. L. Graf.

1. **Argia translata** Hagen.

Youghiogheny River, just above Ohio Pyle, September 2, 1901. Identified by Dr. Calvert. Both sexes and several specimens were taken.

2. **Hetærina tricolor** Burmeister.

Youghiogheny River, just above Ohio Pyle, September 2, 1901. Seven specimens were taken. They are more wary and stronger of flight than *H. americana*. They were usually found resting on bushes overhanging rapids.

During the day when the two above records were made I took 29 specimens of *Boyeria vinosa*. Most of these were males. This species flies very low, just along the water's edge, stopping to inspect every nook and crevice among the rocks. I found it only along the ripples. It is not very wary, but its irregular flight makes its capture rather difficult.

Notes on Collecting Coleoptera in Wyoming and Utah.

By W. Knaus, McPherson, Kansas.

A ten days' trip along the Union Pacific and Oregon Short Line railways through Wyoming and Utah, as far as Salt Lake City, last June, yielded results in an entomological way that may prove of interest to workers in this line of Natural History, and will thus serve as an excuse for presenting these observations to the public.

I left McPherson June 19th, and on the 21st, in the afternoon, was in Laramie, Wyo., situated in the beautiful valley of the same name. It would seeem almost a misnomer to speak of it as a "valley" as the elevation is quite seven thousand feet; but the snow capped mountains looming up to the southeast, south and southwest, serve to remind one that he may be seven thousand feet high and still be in a valley.

A day at Laramie was spent in collecting Coleoptera and mosquito bites along the Laramie River, from a point south of the city to the soda works a mile and a half north, and at, and near two alkali ponds northeastward, and near the edge of the city. Over all this territory the grass was full of mosquitoes of large size, having an appetite most voracious. While collecting a half dozen Coleoptera you would be forced to kill, in self defence, from twenty-five to fifty mosquitoes; thus making

collecting, outside of rare captures, a most active and interesting experience.

I took but one Cicindelid at Laramie, a fine specimen of *fulgida* Say, on red soil without vegetation, a short distance north of the larger alkali pond.

Around the edges of these ponds *Bembidium* was fairly plentiful. Those taken June 21st were, *henshawi* Haywd., *nigripes* Kirby, *rubiginosum* Lec., *ephippiger* Lec., and a new species. A species of *Amara* also occurred in this locality as well as *Amara scitula* Lec., a Pacific coast species. *Harpalus amputatus* Say, and *ellipsis* Lec., were fairly numerous along the Laramie River, but only a single specimen of *basilaris* Kirby was found.

Three species of *Staphylinidæ* were also taken near the alkali ponds; *Aleocharini*, genera and species dubious, *Philonthus aurulentus* Horn, and *Bledius armatus* Er.

One *Hister*, *Saprinus oregonensis* Lec., was common under cow chips, and an *Elater*, *Drasterius elegans* Fab., was beaten from willows.

The Scarabæidæ were represented by *Canthon praticola* Lec., not uncommon in the river valley, and *Aphodius coloradensis* Horn. *Chrysomelidæ* were represented by a few specimens of a species of *Pachybrachys* and *Chysomela verrucosa* Suffr. *Eleodes tricostata* Say, *extricata* Say and *opaca* Say, were somewhat plentiful representatives of the Tenebrionidæ.

Anthicus californicus Laf. was taken on the beach near the alkali ponds.

Curculionidæ were better represented at Laramie than any family of Coleoptera. *Macrops vitticollis* Kirby, occurred on alkali flats under cow chips, and *Lixus laramiensis* Casey, were numerous on a species of thistle on the flats northward. They were feeding on the thistle leaves, and when disturbed would drop down among the spines where they were with difficulty dislodged. A species of *Smicronyx* was also taken here, as well as *Tychius tectus* Lec. Under cow chips on the alkali flats an occasional *Sphenophorus vomerinus* Lec. was found, while in the same situation *Sphenophorus ulkei* Horn was rather common. It is a striking species, easily recognized.

(To be continued)

ENTOMOLOGICAL NEWS.

[The Conductors of ENTOMOLOGICAL NEWS solicit and will thankfully receive items of news likely to interest its readers from any source. The author's name will be given in each case, for the information of cataloguers and bibliographers.]

To Contributors.—All contributions will be considered and passed upon at our earliest convenience, and, as far as may be, will be published according to date of reception. ENTOMOLOGICAL NEWS has reached a circulation, both in numbers and circumference, as to make it necessary to put "copy" into the hands of the printer, for each number, three weeks before date of issue. This should be remembered in sending special or important matter for a certain issue. Twenty-five "extras," without change in form, will be given free, when they are wanted; and this should be so stated on the MS., along with the number desired. The receipt of all papers will be acknowledged.—ED.

PHILADELPHIA, PA., APRIL, 1902.

Would it be practicable to get the concerted action of the numerous societies of the country to publish a periodical (say monthly) to be supported by *all* entomologists. The thought was suggested to me by reading this morning in the last issue of the Bulletin of the Brooklyn Ent. Soc. (1884-5) the following:—"The unanimous expression of the desirability of a union of Entomological journals that might *secure the support* of all interested in Entomology led to the merging of the Bulletin and Papilio under the name of Entomologica Americana, etc." I believe it is now in contemplation to renew the publication of the Bulletin. In the same periodical, in connection with the death of Dr. Le Conte, was a proposition to try to secure a full set of his writings to be published, but the fact that they were so widely scattered, many of them out of print, made it an impossible undertaking. The question at once arose in my mind, Will this *always* be so? If not, what is being done to remedy the evil? As I understand the present situation, a number of our societies publish (intermittently) their *proceedings*. Why should not all the societies of the country unite to support *one* monthly periodical that should publish the proceedings of every society in the U. S. (and Canada as well) and for this receive their united moral and financial support? In such a publication should be published every description of a new species of

all orders. Such a periodical would be an *absolute necessity* to both collectors and entomologists of high and low degree. I see "original descriptions" are first shown the light by *our leading* scientists, one month in the NEWS, the next in the Canadian Entomologist and the next in some "proceedings." A resolution covering the main idea submitted to the entomological societies of the country for discussion and action would very quickly determine the pulse in this matter. Or would rivalry, jealousy, etc., block such a move? Or am I in error in assuming that such a move would be "in the interest of science," which seems to be the sole object of all the brethren of the net."

F. A. MERRICK.

There is no doubt but that a single publication covering the field of American Entomology would be an ideal thing, but while we recognize the difficulties in bringing about such a result, we do not think it impossible. It would centralize the labor which is now being done, mostly without compensation, in a number of cities or by a number of societies. It would become essential to find—First, someone sufficiently interested to push the matter; second, someone to shoulder the great amount of work that such a publication would make necessary.

GETTING INTO TIBET.—Mount Everest, the highest mountain in the world, presents to the adventurous explorer the same fascination as the north pole. No one has ever reached the summit of this pinnacle of the earth, but mountain climbers constantly are trying to do so. To reach the eastern side of the Everest, the side from which the ascent is most feasible, the explorer has to pass into Tibetan territory. This may be done with perfect safety, as the Tibetans have come to the conclusion that any one who would risk his life to try to reach a place where it must of necessity be exceedingly uncomfortable must be crazy. As crazy men are regarded as holy men in Tibet, the mountain climbers are permitted to pass through Tibetan territory unmolested, receiving, on the contrary, many marks of respect from the natives.

The class of explorer whom the ungentle Tibetan turns out of his country with more asperity than any other is the naturalist. Before Sikkim was annexed a man of science had been through the country collecting specimens of the animal and vegetable life of the little kingdom, and the Tibetans now are convinced firmly that any man who collects moths is really trying to grab territory. It is safer to cross into Tibet with a drawn sword in one's hand than with a butterfly net.—*Clipping.*

Entomological Literature.

COMPILED BY HENRY L. VIERECK AND JAMES A. G. REHN.

Under the above head it is intended to note such papers received at the Academy of Natural Sciences of Philadelphia pertaining to the Entomology of the Americas (North and South). Articles irrelevant to American entomology, unless monographs, will not be noted. Contributions to the anatomy, physiology and embryology of insects, however, whether relating to American or exotic species, will be recorded. The numbers in heavy-faced type refer to the journals, as numbered in the following list, in which the papers are published; * denotes that the paper in question contains descriptions of new North American forms. The titles of all papers will be quoted in the original and not translated.

2. Transactions of the American Entomological Society, Philadelphia. —**4.** The Canadian Entomologist, London, Ontario.—**5.** Psyche, Cambridge, Mass —**7.** United States Department of Agriculture, Washington. —**10.** Nature, London.—**11.** The Annals and Magazine of Natural History, London. —**22.** Zoologischer Anzeiger, Leipsig.—**38.** Wiener Entomologische Zeitung, Vienna.—**49.** Termeszetrajzi Füzetek, Budapest.—**51.** Novitates Zoologicæ, Tring.—**156.** Zeitschrift für systematische Hymenopterologie und Dipterologie, Teschendorf.—**157.** The Ohio Naturalist, Cleveland.

THE GENERAL SUBJECT.—Anon. An Insect Destroying Fungus. Bulletin of Miscellaneous Information, No. 32, Botanical Department, Port of Spain, Trinidad, Jan., '02.—**Brokenshire, F. R.** Preparing Insect Eggs. The American Monthly Microscopical Journal, xxiii, No. 2, Feb., '02.—**Brunetti, E.** Ueber das Etiquettiren der Insekten. **38,** xx Jahrgang, x Heft. p. 231, Dec., 1901.—**Calvert. P. P.** A hint for the Preparation of Internal Organs of Dried Insects. Journal of Applied Microscopy and Laboratory Methods, Rochester, v, No. 2.—**Dewitz, J,** Der Apterismus bei Insekten, seine künstliche Erzeugung und seine physiologische Erklärung. Archiv. für Anatomie und Physiologie, I and II heft, p. 61, Leipzig, 1902.—**Forel, A.** Les facultes Psychiques des insects. Revue generale des Sciences pures et appliques, 13 Année No. 3, p. 120, Feb., '02.—**Holmgren, N.** Ueber das Verhalten des Chitins and Epithels zu den unterliegenden gewebearten bei Insekten—figs. Anatomischer Anzeiger xx Band, Nos. 19, 20, Jan. '02.—**Lutz, F. E.** The Ecology of Insect Sounds. **4,** xxxiv, p. 64, March, '02.—**Webster, F. M.** Changes in Entomological Fauna of N. Illinois, **4,** xxxiv, p. 76, March, '02.

ECONOMIC ENTOMOLOGY.—Anon. Proceedings of the Thirteenth Annual Meeting of the Association of Economic Entomologists. **7,** Bulletin No. 31, New Series.—**Fernald, H. T.** The Imported Elm-Leaf Beetle. Bull. Hatch Experiment Station of the Mass. Agricultural College, No. 76.—**Haywood, J. K.** Insecticides and Fungicides. **7,** Farmer's Bulletin, No. 146. —**Hinds, W. E.** Carbon Bisulphid as an insecticide, **7,** Farmers Bulletin, No. 145.—**Kumm.** Einige wichtige bei uns eingeschleppte Pflanzenschädlinge aus der Klasse der Insekten. Schriften der Naturforschenden Gesellschaft in Danzig, 10 Band, 2-3 heft, '01.—**Sherman, F.** Injurious insects. The Bulletin North Carolina State Board of Agric., Raleigh, June, 1901.

—**Smith, J. B.** The Entomologist's Experiment Orchard. New Jersey Agricultural Experiment Stations, Bulletin 155, Jan., 1902 —**Zimmerman, A.** Sammelreferate über die tierischen und pflanzlichen Parasiten der tropischen Kulturpflanzen. Centralb. fur Bakt. Parasit. u Inset. Kr. viii Band, No 2, *Jan , '02.

ARACHNIDA.—**Cambridge, F. O. P.** Arachnida Araneidea (Mexico and Central America). Biol. Cent.-Amer., Arachnida Araneidea, vol. I, pl. xxxviii; vol. II, pp. 297-312*, pls. xxix and xxx.—**Michael, A. D.** British Tyroglyphidæ. Vol. I, London, Ray Society.—**Simon, E.** Arachnida (Hawaiian Islands). Fauna Hawaiiensis, ii, pt. v, 1900.

ODONATA.—**Calvert, P. P.** Odonata (Mexico and Central America). Biol. Cent.-Amer., Odonata*, pp. 49-72, pl. IV.

COLLEMBOLA.—**Börner, C.** Über das Antennalorgan III der Collembolen und die systematische Stellung der Gattungen *Tetracanthella* Schött und *Actaletes* Giard, **22,** xxv Band, No. 662, Jan., '02.

MALLOPHAGA.—**Osborn, H.** Mallophagan records and descriptions, **157,** Vol. II, No. 4, p. 201, Feb., '02.

HEMIPTERA.—**Ball, E. D.** The genus *Cochlorhinus* and its allies (Jassidæ), **4,** xxxiv, p. 53, March, '02.—**Cockerell, T. D. A.** A new gall-making Coccid, **4,** xxxiv, p. 75, March, '02 —**King, G. B.** Further notes on Massachusetts Coccidæ, **4,** xxxiv, p. 59, March, '02.—**Van Duzee, E. P.** Notes on some Hemiptera from British Guiana, **2,** xxvii, No. 4, p. 343, Sept., 1901.

NEUROPTERA.—**Banks, N.** A list of Neuropteroid Insects from Mexico, *2, xxvii, No. 4, p. 361, Sept., 1901.

LEPIDOPTERA.—**Anon.** The Colors of Wings of Butterflies, **10,** lxv, No. 1685. February 13, 1902.—**Croft, W. B.** The Colours of Wings in Butterflies, **10,** lxv, p. 391.—**Cezard, L.** Educations de Bombyciens Sericigenes. Bulletin de la Societe Nationale D'Acclimatation de France (Revue des Sciences naturelles appliques), Paris, 49 Annee, Jan., '02.—**Grote, A. R.** An aberration of *Actias luna*, **4,** xxxiv, p. 70, March, '02. Supplementary note on Burtia, **4,** xxxiv, p. 66. Notes on Mr. Lyman's papers, **4,** xxxiv, p. 75 —**Kunze, R. E.** Larva of Datana (species unknown), **4,** xxxiv, p. 74, March, '02.—**Lower, O. B.** Descriptions of New Genera and Species of Australian Lepidoptera. Transactions and Proceedings of the Royal Soc. of South Australia, Vol. xxv, part II, p. 53, Adelaide, Dec., '01.—**Packard, A. S.** On the limits of the family Saturniidæ, with a note on the genus *Rothschildia*, **5,** Vol. 9, No. 311, p. 321, March, '02.—**Poulton, E. B.** Birds attacking Butterflies, **10,** No. 1685, February 13, 1902. —**Rothschild, W,** and **Jordan, K.** On some Lepidoptera. **51,** viii, No. 4, Dec., '01.—**Schaus, W.** New species of Geometridæ from Tropical America, *part ii, **2,** xxvii, No. 3, p. 241, May, 1901. Descriptions of New American Butterflies, Proc. U. S. Nat. Mus., xxiv, p. 383.—**Smith, J. B.** Notes on *Mamestra olivacea* Morr. and its allies, ***2,** xxvii, No. 3, p. 230, May, 1901.—**Warren, W.** New American Moths, ***51,** viii, No. 4, Dec., '01.

—**Weeks, A. G., Jr.** Descriptions of nine new Bolivian Butterflies, **2,** xxvii, No. 4, p. 353, Sept., 1901.—**Veley, L. J.** Birds attacking Butterflies and Moths, **10,** lxv, p. 392.

DIPTERA.—**Anon.** The Maggot Fly: Myiasis. The Agricultural Journal, Cape Town, xx, No. 2, Jan. 16, '02.—**Folsom, J. W.** The identity of the Snow-flea (*Achorutes nivicola* Fitch), **5,** Vol. 9, No. 311, p. 315, March, '02. —**Kertesz, K.** *Neoglaphyroptera interrupta,* n. sp., **49,** xxiv, p. 495.—Neue und bekannte Dipteren in der Sammlung des Ungarischen National Museums (Tab. xx), xxiv, p. 403, Oct., 1901.—**Meijere, J. C. H.** Ueber die Prothorakalstigmen der Dipteren-puppen, Zoologische Jahrbücher, xv Band, iv heft, p. 623, Jena, Jan., 1902.—**Schnabl, J.** Ein neues Diptera genus, **156,** 2, p. 94, March 1, '02.—**Williston, S. W., Aldrich, J. M , Wheeler, W. M.,** and **Melander, A. L.** Diptera (Mexico and Central America), Biol. Cent.-Amer, I, pp. i-viii and 329-378, pl. vi.

COLEOPTERA.—**Arrow, G. J.** On Rutelid and Melolonthid Beetles from Mashonaland and East Africa, **11,** (7), Feb., '02.—**Bubna, M.** Coleoptera of Cuyahoga County, Ohio, **157,** Vol. ii, No. 4, p. 193, Feb., '02.—**Everts, J. E.** Coleoptera Neerlandica, Tweede Deel, Sgravenhage, 1901.—**Fall, H. C.**—Notes on *Dichelonycha* and *Cantharis,* with descriptions of new species in other genera, ***2,** xxvii, No. 4, p. 277, Sept., 1901.—**Fernald, H. T.** The Imported Elm-Leaf Beetle. See Economic.—**Harrington, W. H.** Note on *Pityophthorus coniperda* Schwarz, **4,** xxxiv, p. 72, March, '02.—**Reitter, E.** Ein neues Coleopteren-genus aus Mittel-Europa, **38,** xx Jahrgang, x heft, p. 229, Dec., 1901.—**Scudder, S. H.** Adephagous and Clavicorn Coleoptera from the Tertiary Deposits at Florissant, Colorado, with descriptions of a few other forms and a systematic list of the non-Rhynchophorous Tertiary Coleoptera of North America. Monographs of the United States Geological Survey, lx.

HYMENOPTERA.—**Ashmead, W. H.** A new *Bruchophagus* from Mexico, **5,** Vol. ix, No. 311, p. 324, March, '02. Hymenoptera Parasitica (Hawaiian Islands), Fauna Hawaiiensis, 1, part iii, 1901.—**Cameron, P.** Descriptions of new genera and species of Hymenoptera from the Oriental Zoological region (Ichneumonidæ, Fossores and Anthophila), **11,** ix (7), Feb., '02. Description of a new genus and five new species of Aculeate Hymenoptera from the Sante Fe Mountains, New Mexico, ***2,** xxvii, No. 4, p. 311, Sept., 1901.—**Cockerell, T. D. A.** North American Bees of the genus *Andrena,* ***11,** Feb., '02.—**Cockerell, T. D. A.,** and **McNary, J.** The mouth parts of *Bombus,* **4,** xxxiv, p. 71, March, '02.—**Cresson, E. T.** Descriptions of some Brazilian *Mutilla,* **2,** Vol. xxviii, p. 1, March 8, '02.—**Dalla Torre, C. G.** Catalogus Hymenopterorum, part 1, vol. iii, Trigonalidæ, Megalyridæ, Stephanidæ, Ichneumonidæ (part). Catalogus Hymenopterorum Lipsiæ, 1901.—**Ducke, A.** Eine neue süd amerikanische *Cleptes* Art. **156,** 2, p. 91, March 1, '02. Neue süd amerikanische Chrysididen, **156,** 2, p. 97. Ein neues subgenus von *Halictus* Latr., **156,** 2, p. 102.—**Konow, F. W.** Ein neuer *Haplostegus* Knw., **156,** 2, p. 103, March, 02. Systematische zusammenstellungder bisher bekannt gewordenen *Chalastogastra* (cont.)

156, 2, p. 113.—**Robertson, C.** Some new Aculeate Hymenoptera from Illinois and Florida, ***2,** No. 3, p. 195, May, 1901.—**Sladen, F. W. L.** Can bees hear? The new scent organ. The British Bee Journal, vol. xxx, p. 61, London, Feb., 02.—**Szepligeti, Gy.** Tropische Cenocoelioniden und Braconiden aus der sammlung des Ungarischen National Museums, **49,** xxiv Kötet, p. 353, Oct., 1901.—**Viereck, H. L.** Some new parasitic Hymenoptera, **4,** xxxiv, p. 67, March, '02.—**Wheeler, W. M.** A new Agricultural Ant from Texas, with remarks on the known North American species. American Naturalist, Cambridge, xxxvi, February, 1902.

Notes and News.

ENTOMOLOGICAL GLEANINGS FROM ALL QUARTERS OF THE GLOBE.

EDITOR ENTOMOLOGICAL NEWS:

Dear Sir.—The prostitution of the office of State Entomologist has become notorious. Professionalism, or attempts at it, in other lines, a small library, a few "bugs," a college education, any of these, or not even as much as one of these, may be the excuse offered by some official in appointing a favorite to fill this position. Recently the governor of one of our commonwealths has been called upon to appoint a State entomologist. One is surprised to find that the appointee's name is not found in the Entomologists' Directory, in the International Zoologists' Directory, or on the membership roll of the A. A. A. S. He is not a subscriber to any entomological publication, to the best of my knowledge he never published an entomological article in his life, and to my certain knowledge he cannot distinguish the orders of insects. Now he is State entomologist in a State with a population of more than two millions, and the Entomologists' Directory gives the names and addresses of five entomologists in this Commonwealth.

The present incumbent will do wonders when he grapples with *Chionaspis furfurus* and *Carpocapsa promonella.* Indeed, I have been informed by an entomologist in a neighboring State that 1000 budded pecan plants, passed by the appointee mentioned above as free from San Jose scale, were all infested with the scale, and not a plant of the lot was budded stock.

The mass of easily accessible entomological literature at the present time makes the compiling of an annual report an easy matter. This annual report is often the only evidence required to substantiate the entomologist's claim to efficiency. It would seem that officials, vested with appointing power, would do well to consult well-known entomologists as to the scientific attainments of possible appointees for this much abused office of State entomologist. Economic entomologists in adjoining States ought not be compelled to accept the bungling reports of some amateur or worse. The position of State entomologist is too important, scientifically and economically, at once and in its future effects, to be the plaything of politicians and demagogues. Yours truly, E. B. WILLIAMSON.

DEPARTMENT OF ECONOMIC ENTOMOLOGY

Edited by Prof. JOHN B. SMITH, Sc. D., New Brunswick, N. J.

Papers for this department are solicited. They should be sent to the editor, Prof. John B. Smith, Sc.D., New Brunswick, N. J.

In a previous communication in this Department I called attention to the work done at the Station für Pflanzenschutz at Hamburg. There is now at hand a series of papers by Dr. Brick the Director, by Dr. Reh the Entomologist in charge, co-operating also with Mr. G. B. King and by Dr. Karl Kraepelin.

Dr. Brick gives a very interesting account of the Station, its methods of inspection, and the new quarters occupied by it. As compared with figures previously given, Canada now leads in the number of scaly apples sent from the Atlantic coast; but nothing like as bad as from the Pacific coast. The percentages given are, for Canadian apples, 4.19 per cent. infested; for the eastern United States, 0.29 per cent. infested; for California, 64 10 per cent. infested; for Oregon, 79 73 per cent. infested. In the total, 31,533 shipments, 1 24 per cent. proved to be infested by the San Jose or pernicious scale.

Japan now comes well to the front as an exporter of scaly plants, and the regulations previously applying only against American nursery stock are now extended to that coming from Japan.

Dr. Kraepelin enumerates 490 species of animals ranging from vertebrates to worms that were found as introductions at the Port of Hamburg, coming from all parts of the world. Thirteen of these are vertebrates, twenty-two are worms and 294 are hexapods or true insects. The Coleoptera are far in the lead; the Hemiptera come next and the Hymenoptera make a good third. The Orthoptera make a fair showing and the other orders follow a long way behind.

After reading over the list of species the only surprising feature is that so few of the introduced species manage to establish themselves. And when we read of the places in which these were found and consider how many must have escaped notice, we wonder indeed that "introduced species" are of so little comparative importance. We have them "from wood," "on Cacti," in the "roots of Orchids," "on decaying Bromelien," "from Cacao bags," "among plants," "with tobacco," "in flour," "on board a steamer," "in a lemon box," "in an oil cake," etc.

In fact, only he who has done inspection work, and who has sifted insects has any fair idea of the multiplicity of ways in which specimens may be transported and how closely they can hide. It gives one an increased appreciation of the geographical barrier to find how few species succeed in passing it.

* * * * * * * * * *

Lists of species are sometimes of great value and sometimes do not tell very much. This observation is *apropos* of the list of species taken in Georgia while jarring peach trees to capture plum curculio. The list, by Messrs. W. M. Scott and W. F. Fiske, is a very careful and conscientious one; yet no Coleopterist can look it over without the feeling that a large percentage of the captures are casuals that might have been found in beating almost any kind of tree or shrub. As a contribution to the fauna of the peach the list must be carefully scrutinized, for many of the species if they found food there at all found it on the fungi on dead wood or in decaying conditions, or in the dead wood itself.

It would have added materially to the list had there been some indication as to what was and what was not a peach insect.

* * * * * * * * * *

Prof. E. Dwight Sanderson of the Delaware College and Experiment Station has given us a book on "Insects Injurious to Staple Crops," published by John Wiley and Sons, New York. The "staple crops" are grains and grasses, Indian corn, clover, cotton, tobacco, potato, sugar beet, and hop. Under each heading the principal injurious species are grouped, somewhat on the plan of Saunders' Fruit Insects, and in each case, after a brief description, the most practical remedial measures are given. There is a short general discussion of the injury done by insects, some notes are given on the structure, principally of the mouth parts, and a discussion is presented concerning beneficial insects and the effect of farm practice on the injurious species.

No originality is claimed for the contents of the book and it is, in reality, merely a compilation of well known facts and methods in convenient form. The discussion of insecticides is all too brief from the farmer's standpoint and, if it was deemed desirable to give any instruction concerning mouth structures, surely better pictures could have been obtained than the obscure half tones on pp. 12, 13 and 14. So, for all the practical information it conveys, figure 10, on p. 18, might just as well have been omitted.

But the book is a handy one and it fills a place heretofore not occupied.

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A new book on Invertebrate Zoology comes from Henry S. Pratt, Ph.D., of Haverford, in which the insects receive an unusual amount of recognition. Quite unlike many other "Courses," Dr. Pratt begins with the highest type,—a wasp or other Hymenopterous insect,—but confines it to external characters until he reaches the grasshopper, when the internal structure is taken up and the mouth parts are described.

There is nothing especially new in either the method or the facts brought out; but it is encouraging to find in a general "Course" of invertebrate zoology a fair share of time devoted to a study of the leading insect orders. The book is published by Ginn & Co., and is unusually well made and printed.

* * * * * * * * * *

One of the worries of the economic entomologist comes in the selection of the names by which the insects are to be known in his bulletins and to his constituents. Sometimes the matter is easy; as when some striking color or other habital character exists, or when the scientific name lends itself to ready translation. But sometimes these things fail and practically it remains to make the scientific name the popular one, in whole or in part, *e.g.*, the cranberry *Teras*, the apple *Bucculatrix*, the *Petilia misella*, etc. I have found in my experfence that it is not much more difficult to get a farmer to use a reasonably short scientific name than a clumsy "popular" one. But when once a scientific name has come into popular use, that name should be continued as such, even if the scientific name is changed, in whole or in part.

A dozen years ago or more, when I first began work in New Jersey, I studied the pests of a special crop and, for three years in succession, reported progress to an Association of the growers of that crop. It was my misfortune to find in one of the leading pests one whose generic position fluctuated abominably. I tried conscientiously to keep up with the changes and every time I talked to my constituents referred to it by a new generic name. Finally, one of the growers remarked, rather sarcastically, that there seemed to be very little certainty in entomolgy when even the names of the insects changed every year! I took the suggestion to heart, and now-a-days when I have once used a name in a "popular" way, that "popular" use of the term continues, no matter what change the systematist makes, and no matter how well the change may be based from his standpoint.

Doings of Societies.

A regular meeting of the Chicago Entomological Society was held in the John Crerar Library, Thursday evening, February 20, 1902, at 8 o'clock. Eight members present. President W. E. Longley in the chair. Visitors Mr. C. Schwartz and Miss Spitler, of Wellesley, Mass.

Mr. Wm. J. Gerhard was elected a member of the Society by unanimous vote.

The topic, Mimetic Forms and Protective Coloring, was then discussed. Mr. C. C. Adams read an interesting paper. Among other things he showed how the coloring matter in the intestines of some insects helped to give them the color of the food plant, and also that the color alone was often not so important a factor in mimetic protection as the shape. Some specimens of flies were then shown that mimicked certain bees and wasps. Mr. A. Kwiat also exhibited some Lepidoptera.

President Longley read the opinions of authors as to the cause of mimicry. Messrs. Comstock exhibited specimens of *Limentis floridensis* and pointed out the fact that this insect took the color of *Anosia berenice* which seems to be the commonest *Anosia* in Florida during the summer. Some protected exotic butterflies, such as *Hebomoia glaucippe*, *Hypolimnas misippus*, *Anosia chrysippus*, etc., were also shown. Mr. Schwartz exhibited some interesting Lepidoptera mounted on plaster of paris casts. He showed a specimen of *Phyllium scythe* from Ceylon that resembled a clump of guava leaves. These specimens were from the exhibit of Denton Bros. The meeting adjourned at 9.35 P. M., after which the members viewed the different exhibits.

JOHN COMSTOCK, *Secretary.*

The twenty-third regular meeting of the Harris Club was held at 35 Court Street, Boston, on the evening of January 14, 1902. President Newcomb in the Chair. Dr. L. O. Howard spoke informally on opportunities for useful work in Entomology. Mr. Kirkland told of the damage done to willows and poplars in the vicinity of Boston by *Saperda concolor*, and showed a photograph illustrating the work of this insect in *Populus tremuloides*, with punctures made by downy woodpeckers in their search for the borers. The work of this insect differs from that of *Cimbex* in that the slit made in the bark by the ovipositing ♀ is not straight, but horse-shoe shaped. In the discussion which followed, Dr. Howard called attention to the symbiotic relation between this *Cimbex* and the willow-shoot horn tail, *Phylloecus integer*. The latter, preferring dying stalks to healthy ones, oviposits by preference in shoots already injured by the attack of *Cimbex*. The genus *Thecla* was discussed by various members, who exhibited specimens.

Officers were elected for the ensuing year as follows: President, P. G. Bolster; 1st Vice President, W. F. Low; 2d Vice President, W. D. Denton; Secretary and Treasurer, W. L. W. Field.

Unanimous votes of thanks were passed to Dr. Howard, for his suggestive remarks, and to the retiring President, for his ceaseless efforts to promote the Club's welfare. The meeting was then adjourned.

W. L. W. FIELD, *Secretary.*

Preliminary steps to organize The Entomological Society of Western Pennsylvania were taken on the evening of Saturday, March 8th, 1902. A general invitation to all persons interested in entomology in any of its branches had been extended by the Director of the Carnegie Museum to the public to meet in the Botanical laboratory of the Museum on that date at 8 P. M. In response to the invitation twenty-three persons were present at the meeting in person or by letter signifying their desire to participate in the formation of such a society. A preliminary organization was effected with Dr. D. A. Atkinson, of Pittsburgh, in the Chair, and Mr. F. A. Merrick, of New Brighton, Pa., as Secretary. A general discussion took place, the result being the final adoption for the association of the name above given. W. J. Holland, LL.D., the Director of the Carnegie Museum, was chosen as the first President of the Society, Mr. F. A. Merrick was elected as Secretary, and Dr. D. A. Atkinson as Treasurer. It was resolved to hold monthly meetings on the evening of the first Saturday of each month. A committee, consisting of Mr. Herbert H. Smith, Dr. D. A. Atkinson and Mr. Henry Engel, was appointed to prepare a preliminary draft of a constitution and by-laws.

The persons who have thus signified their intention to become members of the Society are the following:

Dr. D. A. Atkinson, Pittsburgh; Hon. Frank Cowan, Greensburg, Pa.; George D. Ehrman, Pittsburgh; Henry Engel, Pittsburg; Ellis M. Frost, Pittsburgh; Robert H. Foerster, Pittsburgh; W. J. Holland, Pittsburgh; F. Knechtel, Swissvale, Pa.; Henry G. Klages, Jeannette, Pa.; George T. Krautwurm, Pittsburg; B. J. Krautwurm, Pittsburgh; H. Lippold, Allegheny, Pa.; C. Maier, Allegheny, Pa.; Frederick Marloff, Oak Station P. O., Allegheny Co., Pa.; F. A. Merrick, New

Brighton, Pa.; B. A. Overbeck, Allegheny, Pa.; Geo. N. Pohl, Newcastle, Pa.; J. Reitlechner, Allegheny, Pa.; Rev. Jerome Schmitt, Beatty, Pa.; Herbert H. Smith, Pittsburgh; Mrs. Herbert H. Smith, Pittsburgh; Frederick Somers, Allegheny, Pa.; E. J. Voegtly, Pittsburgh; V. J. Zarobsky, Wilmerding, Pa.

After the transaction of business the President of the Society placed on exhibition for the members who were present the collection of Cicindelidæ contained in the Ulke collection, some thirty species of the Genus *Morpho*, including a remarkably fine pair of *Morpho hecuba*, and a large series of specimens representing various species of the Genus *Troides*, (Ornithoptera *auct.*) and its allies, among them *Schoenbergia paradisea* and *tithonus*.

The next meeting will be held on the evening of April 5, at which a large attendance of the knights of the nets and cyanide bottle is expected.

At the February meeting of the Feldman Collecting Social, held at the residence of Mr. H. W. Wenzel, 1523 S. 13th Street, eleven persons were present.

The President read his deferred annual address for 1901.

Prof. Smith referred to the fact that it was not known where the various stages of *Culex sollicitans* pass the winter. Referring to *Leucania unipunctata*, the lack of variation and non-tendency to form new types were dwelt on. On the contrary, the wheat head army worm, *L. albilinea*, also widely distributed from Canada to Mexico, had been confused with a supposed variety which is really a distinct species. Among other supposed varietal forms he had discovered no less than four distinct species having good structural characters in the genitalia. The divergence from the type of these varieties was dwelt on, and the speaker did not believe the different varieties would interbreed if the two sexes of the same form existed. These forms are local, and in time would no doubt become distinct species.

The peculiarities of local forms of *Cicindela* and *Cychrus* were dwelt on by Messrs. H. Wenzel and Harbeck.

Mr. Wenzel referred to the confusion in the synonymy of

certain species of *Cicindela*. He did not believe *C. consentanea*, *patruela* and *sexguttata* to be identical as some workers seem to think. In the West, species are attracted by lights at night, whereas in the East the same species do not seem to have this habit.

Prof. Smith spoke of the entomological work of Mr. John Akhurst, of Brooklyn, N. Y., whose death has been announced.

Prof. Smith reported that the Newark Entomological Society had appointed a committee to arrange for an inter-city field meeting on July 4th., and had delegated him to ask the co-operation of this society.

On motion, the following Committee was appointed to confer with the Newark Society on this matter. Messrs. H. Wenzel and Fox; Johnson, *ex-officio*.

WILLIAM J. FOX, *Secretary*.

A meeting of the American Entomological Society was held February 27, thirteen persons present. The President, Mr. P. P. Calvert, occupied the Chair. The thanks of the Society were extended to Mr. S. N. Dunning for his gift of a valuable collection of Hymenoptera and to Prof. John B. Smith for the presentation of species of *Leucania* new to the collection. Mr. Rehn stated that Mr. Viereck and himself expected to spend ten weeks in collecting insects in Texas, Mexico and New Mexico. Mr. Rehn also exhibited a collection of Orthoptera from San Diego, California. It contained five genera new to the collection and some new species. Dr. Calvert spoke on the importance of applying statistical methods to large series of individuals in order to determine, by percentages, what are the more variable, and what are the less variable differences between animals. He contended that this is the only true method for determining what characters are of generic and specific value, and that every student who has large series at his disposal should gather such statistics as the basis of work in classification (taxonomy). He illustrated his remarks by statistics which he is gathering during the progress of his work on the Odonata for the Biologia Centrali-Americana.

H. SKINNER, *Secretary*.

EXCHANGES.

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Specimens will be named under the following conditions: 1st, The number of species to be **limited to twenty-five** for each sending; 2d, the sender to pay all expenses of transportation and the insects to become the property of the American Entomological Society; 3d, Each specimen must have a number attached so that the identification may be announced accordingly; 4th, All insects must be mounted. Exotic species named only by special arrangement with the Editor, who should be consulted before specimens are sent. Send a 2-cent stamp with all insects for return of names. **Please put date of capture and exact locality on each specimen.** Before sending insects for identification, read page 41, Vol. III. Address all packages to ENTOMOLOGICAL NEWS, Academy Natural Sciences, Logan Square, Philadelphia, Pa.

Desires Papilionidæ, Cicindelidæ, Cycrini and Cetonidæ of the world, either by purchase or exchange.—Geo. A. Ehrmann, 2314 Sarrh Street, Pittsburgh, Pa.

Wanted.—Perlidæ and the immature stages of aquatic insects generally. I will make determinations where possible, and give exchanges, when desired.—James G. Needham, Lake Forest, Ill.

Cash or good exchange given for no. 3, vol. ii. and no. 1, vol. iii, of Papilio, and vols. i, ii and iii of Bulletin Brooklyn Ent. Soc.—H. H. Newcomb, 35 Court Street, Boston, Mass.

Lepidoptera.—*Calocala badia. praeclara*, etc.; also other Noctuids in exchange for specimens new to me.—Geo. Kircher, 573 Germania Avenue, Jersey City Heights, N. J.

Wanted for cash or exchange, Pupæ of the foll: Sphinges; *T. modesta; S. ermitus, lucitiosa; Kalmiæ; D hylæus; C. juglandis; A. versicolor; A. nessus; Thy abbotii.* Address with prices.—Henry Engel P. O. Box 369, Pittsburg, Pa.

Lepidoptera of United States and Europe to exchange for other North American specimens not in my collection. Correspondence in English and German.—Charles Schlieter, 601 Christiana Ave., Chicago, Ill.

Wanted.—Microlepidoptera, especially Tineina of the United States. Will either buy or give exchanges. Desire to open correspondence with collectors of these groups and will determine material.—W. G. Dietz, 21 N. Vine Street, Hazelton, Pa.

Exchange.—200 Chrysalids; *Papilio Ajax;* 80 Chrysalids; *Papilo turnus.* Live Pupas of *Myrones* and Cocoons of *Promethus.* Will take Exotic flies, Western bird skins and humming birds' nests.—W. H Valway, 2671 Broadway, Cleveland, Ohio.

Wanted live Pupæ, also Lepidoptera, Coleoptera. Will give European and Exotic species in exchange.—Arnold Voelschow, Schwerin Meckl., Germany.

Lepidoptera for exchange from United States, Europe, South America and East India for specimens new to my collection.—A. Troschel, 446 Larchmont Ave., Chicago.

Lepidoptera.—Exchange desired with collectors in any State. Please send lists.—John & Hurd Comstock, 1572 Ridge Ave., Evanston, Ill.

Wanted.—Hymenoptera, especially ants and wasps from the Southern and Western States and American Termites, and any entomological publications.—Canisius College Museum (H. Wolff, S. J.), Buffalo, N. Y.

Exchange.—*Cicindela purilana* for any Cicindelidæ new to my collection. Will exchange also N. American or European Coleoptera. Send for lists. Correspondence in English and French.—C. Crozet, New Park Ave., Hartford, Conn.

Diptera.—Wanted, as many Asilina as possible from all parts of North America.—Write for particulars to Prof. C. H. Fernald, Amherst, Mass.

Lepidoptera —*Argynnis nitocris* var. *nigrocærulea* Ckll., for exchange. Also many other rare butterflies.—Henry Skinner, Acad. Nat. Sciences, 1900 Race Street, Philadelphia.

Exchange.—British Columbia Lepidoptera. Only North American species wanted. Send lists.—Ernest M. Anderson, 64 Superior Street, Victoria, B. C.

Lepidoptera —I wish to purchase Lepidoptera of North America, especially *Noctuidæ*.—Edouard Brabant, Morenchies Par. Cambria (Nord), France.

Exchange.—Will collect Scydmænidæ and Pselaphidæ in exchange for papers on the families of Scydmænidæ, Pselaphidæ and Staphylinidæ. —August Schmidt, 1836 E. Atlantic St., Philadelphia.

Lepidoptera.—I would like to correspond and exchange with some new beginners.—Charles L. Heink, 4320 North Eleventh St., St. Louis, Mo.

Wanted.—Living larvæ. pupæ, fertile females or eggs of any of the North American *Callimorphæ* (genus *Haploa* Hüb.). Will exchange New Hampshire Lepidoptera.—F. H. Foster, Claremont, N. H.

Dytiscidæ from Florida and other Southern States, from Illinois and Ohio and from the Northwest, Alaska, British Columbia and Hudson Bay wanted in exchange for cash.—Address John D. Sherman, Jr., 148 East Eighteenth Street, New York City.

Wanted at once —For cash. One hundred cocoons: *cecropia, polyphemus* or *promethea*. L. O Howard, Division of Entomology, U. S. Dept. of Agriculture. Write before sending.

In Exchange for specimens of equal value, especially *Catocalas*. I offer *C. Blandula, Micronympha, Alabamæ, Olivia*, etc.—Joseph Mattes, 138 East 48 Street, New York City.

Chrysomelidæ Wanted.—Especially *Cryptocephalini*. Undetermined material accepted. Will give good exchange. Frederick Knab, 8 Springfield Street, Chicopee, Mass.

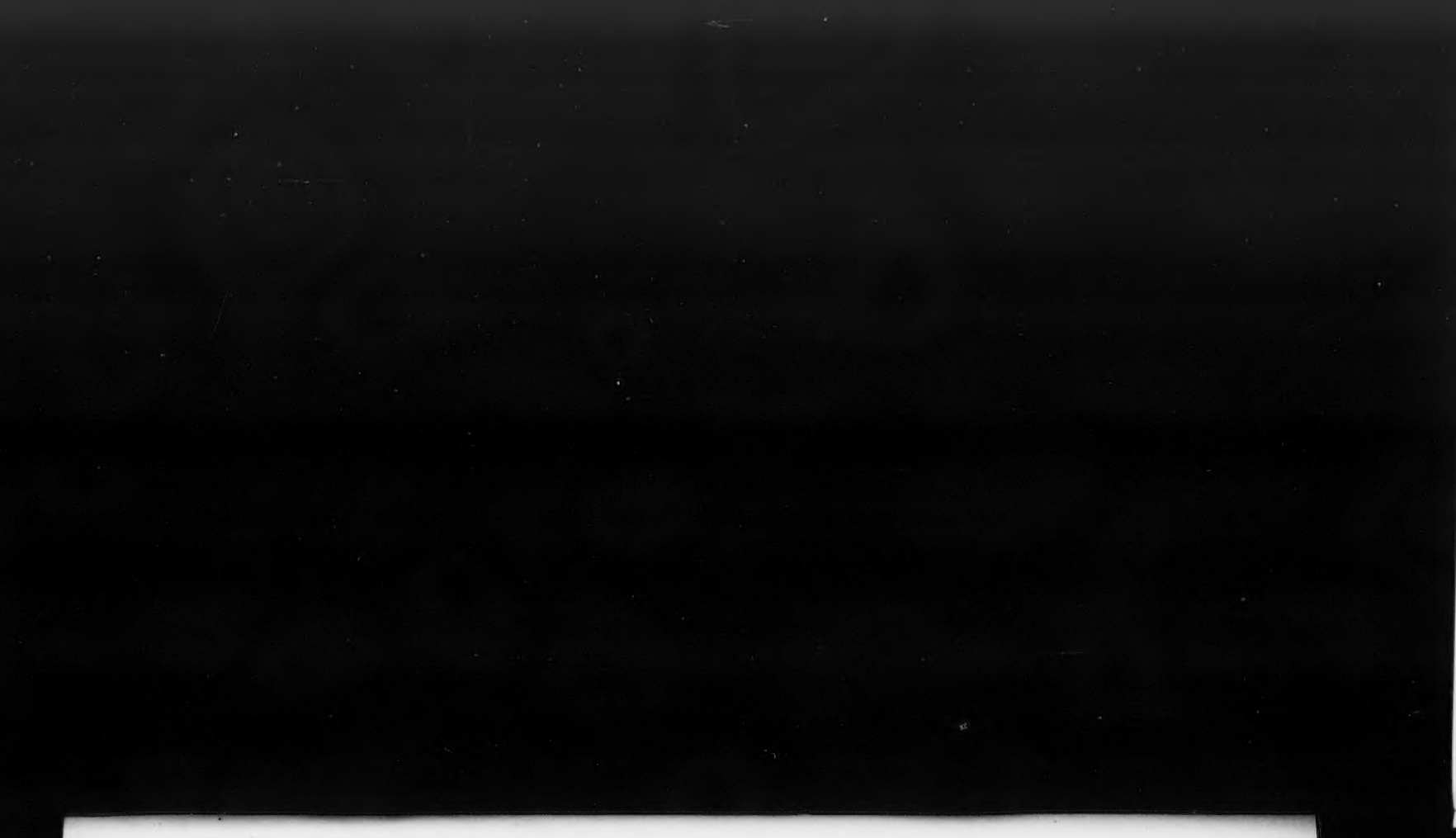
Lepidoptera.—Wanted by purchase or exchange.—B. A. Overbeck, 30 Hill St., Allegheny, Penna.

Wanted.—Cocoons of Cynthia and Luna moths in exchange for cocoons of Promethus and Cecropia.—Harry Russell, 905 Clinton Ave., Bridgeport, Conn.

Arctians.—Living eggs or larvæ of any North American moths of the genus *Arctia* wanted for the purposes of studying preparatory stages. Will be glad to render help, if possible, as to wants of anyone assisting.—Arthur Gibson, Cent. Exp. Farm, Ottawa, Can.

Basswood Insects.—The writer is making a special study of insects injurious to Basswood (*Tilia*). Notes on insects found feeding on this tree will be acceptable.—Arthur Gibson, Cent. Exp. Farm, Ottawa, Can.

Lepidoptera.—Wanted for cash: cocoons of *A. pernyi* and eggs of *A. yama-mai* and *A. pernyi*.—R. Ludwig, 513 Empire Bldg., Atlanta, Ga.



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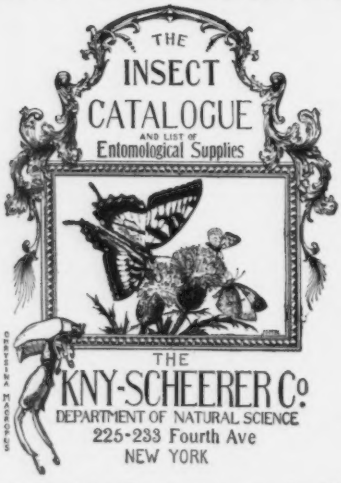

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